

## PATENT APPLICATION

Sheet 1 of 6

FORM PTO-1449	ATTY. DOCKET NO. 200308295-2	APPLICATION NO.	CONFIRMATION NO.
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT Vladimir Pavlovic et al.		
(Use several sheets if necessary)	FILING DATE 09/16/03	GROUP	

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
S.A.	1A	5,325,098	06/28/94	Blair et al.	
	1B	5,923,712	07/13/99	Leyendecker et al.	
	1C	6,064,703	05/16/00	Cusani et al.	
	1D	6,226,409 B1	05/01/91	Cham et al.	
	1E	6,243,037 B1	06/05/01	Pulford et al.	
	1F	6,314,204 B1	11/06/01	Rehg et al.	
	1G	6,393,046 B1	05/21/02	Kohli et al.	
	1H	6,396,878 B1	05/28/02	Pitrainen	
	1I	6,480,876 B2	00/12/02	Rehg et al.	
	1J				
	1K				

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check If Translation attached
	1L				
	1M				
	1N				
	1O				
	1P				

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

S.A.	1Q	Murphy, Kevin P., Switching Kalman Filters, August 21, 1998, pp. 1-16.
S.A.	1R	Murphy, Kevin P., Inference and Learning in Hybrid Bayesian Networks, Report No. UCB/CSD-98-990, January 1998, pp. 1-18.
S.A.	1S	Ghahramani, Zoubin and Hinton, G.E., Variational Learning for Switching State-Space Models, Gatsby Computational Neuroscience Unit., pp. 1-26.

EXAMINER.

DATE CONSIDERED

## PATENT APPLICATION

Sheet 2 of 6

FORM PTO-1449  LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT  (Use several sheets if necessary)	ATTY. DOCKET NO. <b>200308295-2</b>	APPLICATION NO.	CONFIRMATION NO.
	APPLICANT <b>Vladimir Pavlovic et al.</b>		
	FILING DATE <b>09/16/03</b>	GROUP	

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	2A				
	2B				
	2C				
	2D				
	2E				
	2F				
	2G				
	2H				
	2I				
	2J				
	2K				

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	2L					
	2M					
	2N					
	2O					
	2P					

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

S.A.	2Q	Pavlovic, Vladimir, et al., Time-Series Classification Using Mixed-State Dynamic Bayesian Networks, In Computer Vision and Pattern Recognition, pp. 609-615, June 1999.
S.A.	2R	Pavlovi, Vladimir, et al., A Dynamic Bayesian Network Approach to Figure Tracking Using Learned Dynamic Models.
S.A.	2S	Welch, Greg and Bishop, Gary, An Introduction to the Kalman Filter, Department of Computer Science, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3175, September 17, 1997, pp. 1-16.

EXAMINER

DATE CONSIDERED

**PATENT APPLICATION**

Sheet 3 of 6

<p>FORM PTO-1449</p> <p><b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b></p> <p>(Use several sheets if necessary)</p>	<p>ATTY. DOCKET NO.</p> <p><b>200308295-2</b></p>	<p>APPLICATION NO.</p>	<p>CONFIRMATION NO.</p>
<p>APPLICANT</p> <p><b>Vladimir Pavlovic et al.</b></p>			
<p>FILING DATE</p> <p><b>09/16/03</b></p>		<p>GROUP</p>	

**REFERENCE DESIGNATION                      U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	3A				
	3B				
	3C				
	3D				
	3E				
	3F				
	3G				
	3H				
	3I				
	3J				
	3K				

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	3L				
	3M				
	3N				
	3O				
	3P				

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

S.A	3Q	<a href="http://www.scs.leeds.ac.uk/scs-only/teaching-materials/HiddenMarkovModels/html_dev/main.html">http://www.scs.leeds.ac.uk/scs-only/teaching-materials/HiddenMarkovModels/html_dev/main.html</a>
S.A	3R	Shumway, R.H. and Stoffer, D.S., Dynamic Linear Models with Switching, Journal of the American Statistical Association, September 1991, Vol. 86, No. 415.
S.A	3S	Bar-Shalom Y. Li, X-R, Estimation & Tracking: principles, techniques, and software. YBS, Storrs, CT, 1998, pp. 446-484.

EXAMINER

DATE CONSIDERED

*2.7.04*

## PATENT APPLICATION

Sheet 4 of 6

FORM PTO-1449	ATTY. DOCKET NO. 200308295-2	APPLICATION NO.	CONFIRMATION NO.
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT Vladimir Pavlovic et al.		
(Use several sheets if necessary)	FILING DATE 09/16/03	GROUP	

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	4A				
	4B				
	4C				
	4D				
	4E				
	4F				
	4G				
	4H				
	4I				
	4J				
	4K				

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	4L					
	4M					
	4N					
	4O					
	4P					

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

S.A.	4Q	Jordan, M.I., et al., An Introduction to Variational Methods for Graphical Models, October 11, 1999, <a href="http://www.stat.berkeley.edu/tech-reports/index.html">http://www.stat.berkeley.edu/tech-reports/index.html</a> , Report#508.
S.A.	4R	Ghahramani, Z., et al., Switching State-Space Models, pp. 1-23. Technical Report CRG-TR-96-3, Dept. of Computer Science, University of Toronto.
S.A.	4S	Rabiner, L.R. and Juang, B.H., An Introduction to Hidden Markov Models, IEEE ASSP Magazine, January 1986, pp. 4-16.

EXAMINER

DATE CONSIDERED

**PATENT APPLICATION**

Sheet 5 of 6

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
	200308295-2		
	APPLICANT		
	Vladimir Pavlovic et al.		
	FILING DATE	GROUP	
	09/16/03		

**REFERENCE DESIGNATION**

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	5A			
	5B			
	5C			
	5D			
	5E			
	5F			
	5G			
	5H			
	5I			
	5J			
	5K			

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	5L				
	5M				
	5N				
	5O				
	5P				

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

S.A	5Q	Kim, Chang-Jin, Dynamic Linear Models with Markov-Switching, Journal of Econometrics 60, (1994) pp. 1-22.
S.A	5R	Krishnamurthy, V. and Evans, J., Finite-Dimensional Filters for Passive Tracking of Markov Jump Linear Systems, Automatica, Vol. 34, No. 6, pp.765-770, 1998.
S.A	5S	Minka, Thomas P., From Hidden Markov Models to Linear Dynamical Systems, pp. 1-10. <a href="ftp://vismod.www.media.mit.edu/pub/tpminka/papers/minka-lds-tut.ps.gz">ftp://vismod.www.media.mit.edu/pub/tpminka/papers/minka-lds-tut.ps.gz</a> .

EXAMINER	DATE CONSIDERED
<i>S. A. [Signature]</i>	2,7,04

## PATENT APPLICATION

Sheet 6 of 6

<b>FORM PTO-1449</b>  <b>LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT</b>  (Use several sheets if necessary)	ATTY. DOCKET NO. <b>200308295-2</b>	APPLICATION NO.	CONFIRMATION NO.
	APPLICANT <b>Vladimir Pavlovic et al.</b>		
	FILING DATE <b>09/16/03</b>	GROUP	

## REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	6A			
	6B			
	6C			
	6D			
	6E			
	6F			
	6G			
	6H			
	6I			
	6J			
	6K			

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR APPLICANT	Pages/Columns/Lines Where Relevant Passages/Figures Appear	Check if Translation attached
	6L				
	6M				
	6N				
	6O				
	6P				

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

S.A.	6Q	Ghahramani, Z. and Hinton G.E., Parameter Estimation for Linear Dynamical Systems, pp. 1-6, Technical Report CRG-TR-96-2, Dept. of Computer Science, University of Toronto.
S.A.	6R	A Brief Introduction to Graphical Models and Bayesian Networks, <a href="http://www.cs.berkeley.edu/murphyk/Bayes/bayes.html">http://www.cs.berkeley.edu/murphyk/Bayes/bayes.html</a> , pp. 1-19.
S.A.	6S	Maybeck, P.S., Stochastic Models, Estimation, and Control, Vol. I Academic Press, 1979.

EXAMINER

DATE CONSIDERED

2/7/04

